CNA e Tool
Known Issues and Solutions

U.S. Department of Housing and Urban Development (HUD)

Federal Housing Administration (FHA)

December 2017

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1. User Access

1.1 Deactivation of User ID

Most secured web portals suspend a User ID after a certain period of inactivity. The maximum number of consecutive days of inactivity that trigger a lock-out varies widely depending upon perceived security risks. HUD systems lock-out any user after 90 days of inactivity.

Therefore, it is advisable that CNA e Tool users log-onto the system at least once every two months to assure a safe margin so that no period of inactivity, illness or vacation results in loss of access.

1.2 Double Authentication of FHA Lender Users

FHA Lenders using the CNA e Tool need to keep their User IDs "alive" in <u>both</u> FHA Connection as well as Secure Systems.

Even though an FHA Lender may access the CNA e Tool by logging into Secure Systems directly, doing so regularly without also occasionally logging into FHA Connection will cause FHA Connection to lock them out. If a user is locked out of FHA Connection, they are also locked out of Secure Systems, and thus no longer able to access the CNA e Tool.

While double authentication can be an inconvenience, FHA Lenders using the CNA e Tool should take the following steps at least once every two months to avoid lock-outs. (In future years HUD will implement a single sign-on between FHA Connection and Secure Systems to eliminate double authentication.)

Go to the FHA Connection portal at:

https://entp.hud.gov/clas/
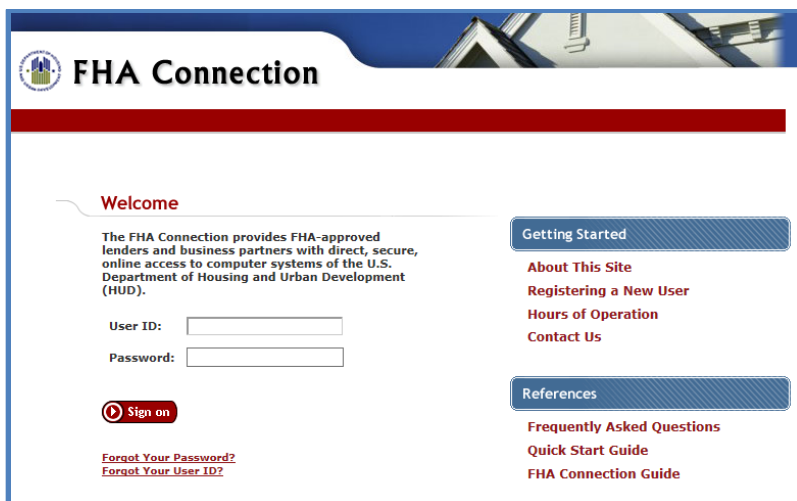
- Login with the HUD-issued M ID and Password
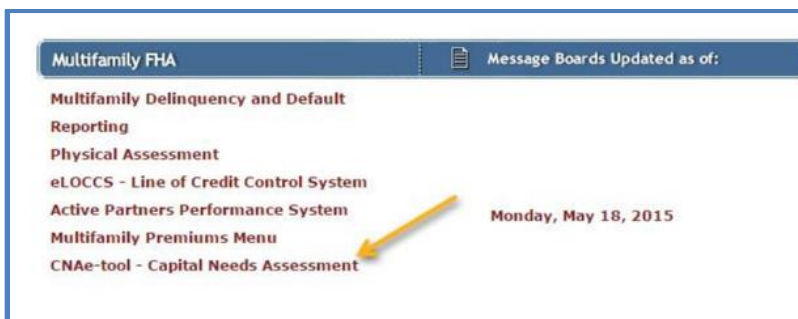

- Click the Multifamily FHA button

- Click the CNA e Tool menu link which will redirect the user to Secure Systems. See below.

- The FHA Lender must then login to Secure Systems with their M ID and Password
- Click Accept on the next screen to access the Secure Systems Main Menu

1.3 Blank Screen after Selecting CNA e Tool

Some users have observed that a blank screen appears after clicking the "CNA e Tool" link.

If the CNA e Tool screen doesn't display, the user should Refresh/Reload the screen. The proper method for Refreshing or Reloading a web page varies slightly from browser to browser.

Generally, every browser has a Reload icon that may look something like this ⟳ . Click the icon. Alternatively, all browsers also have a Refresh/Reload link/icon in a dropdown menu which displays when the user right-clicks anywhere on the webpage. Below are examples from

Chrome, FireFox, and Internet Explorer. See Section 2 for more information on how user experience varies based on their chosen browser.
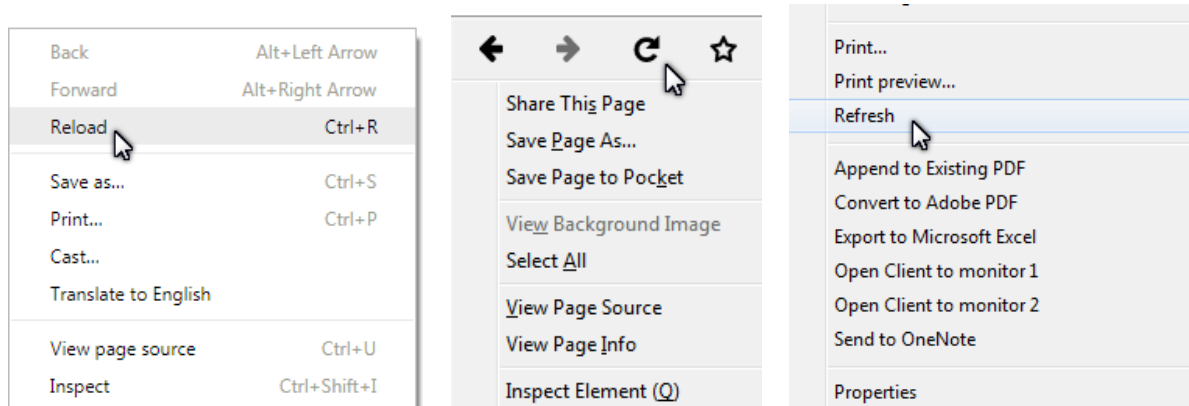
If the CNA e Tool still fails to open, the user should close and reopen the browser, and log in again. If this fails to correct the problem, the user should clear the browser cache (see Section 2.1) and retry. If the user remains unable to open the CNA e Tool, report this failure by e-mail, including screen shots of results, to CNAAccess@hud.gov.

1.4 E-mail Validation

When validating an Assessment Tool via email, the user must not attach any other files except the Assessment Tool to the email. This includes attachments/images that may otherwise be included in the signature block of the outgoing message. In addition, the email must include some text in the body. If the user does not include any text, the email may be marked as spam and the validation will not take place. The user also will not receive any email confirmation, as would otherwise occur.

2. User Interface/Experience – Browser Issues

2.1 Web Browsers and Cache

The CNA e Tool has been tested with Internet Explorer, Chrome, FireFox, Vivaldi, and Safari. We recommend that users have the latest version of their browser when using the CNA e Tool. Legacy versions of these web browsers may be functional, but the user may experience issues.

Clearing Web Browser Cache

After updating to a new browser version or if experiencing a page-load issue, such as the one described in Section 1.3, the user should clear their cache. (Clearing cache is also a best practice to ensure operational efficiency on the user's computer.) Accessing the cache clearing function differs from browser to browser, and may also differ from one version of the browser to another.
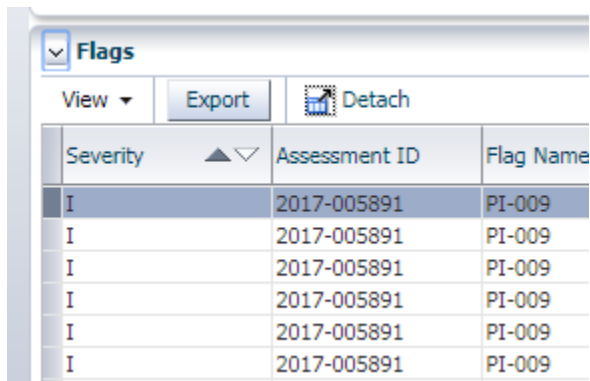
Below are sample links to instructions on how to clear browser cache. If the user's browser interface doesn't match what is pictured in the instructions, the user should search for "how to clear browser cache on ….." and specify the browser type and version. The internet is the best source for the latest instructions.

- Google Chrome ⬈
- Microsoft Internet Explorer (IE) ⬈
- Mozilla Firefox ⬈

2.2 Exporting and Saving CNA Validation and Submission Data Panels

We have observed that the file naming and saving procedure for exports of data from either the Public Validation Engine or the Submission Portal varies among browsers, notably Microsoft Internet Explorer and Google Chrome, and may not be intuitive.

Data in most CNA e Tool panels can be exported by using the "Export" button.

While the export will cause the data to display in Excel, the default file type is set to a web page (html). When saving the file on a local PC, the user must explicitly choose to save it as an Excel Workbook. The procedure for saving these exports as true Excel files differs slightly from browser to browser.

Google Chrome Example

When accessing the CNA e Tool with Chrome, an export of data from a panel may appear as a file "*panel name*.xls" with an icon in the lower left of the screen. Alternatively, if the user has instructed Google Chrome to always open files of this type, they may see the following:
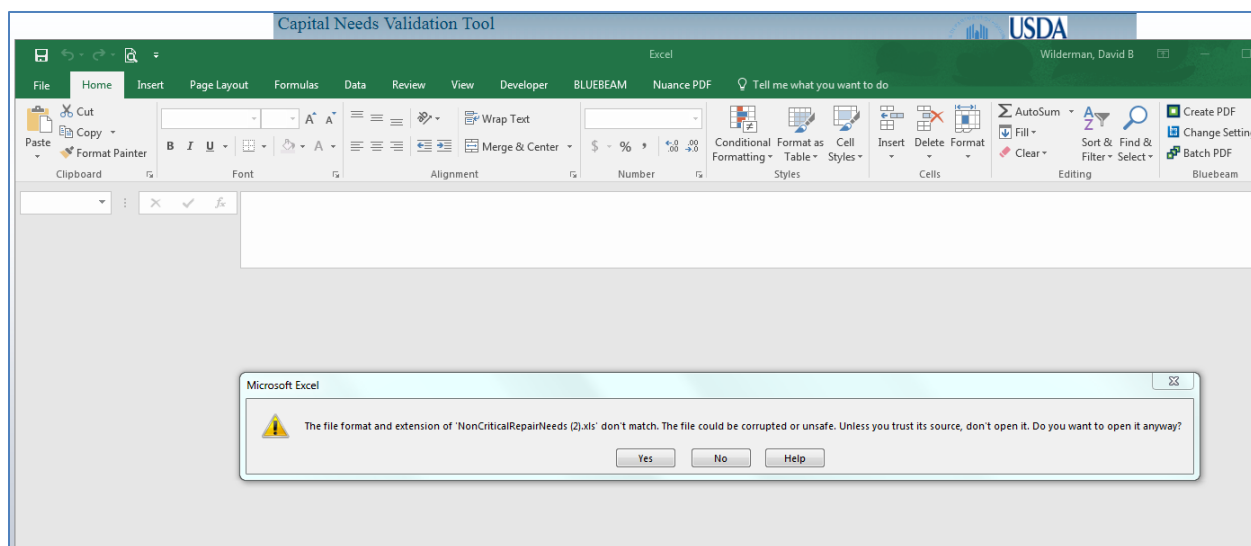
The user should click "Yes" to open the downloaded Excel file. Then the user may save the file to their computer, but should take care to save the file as an Excel workbook, rather than as a "Web Page html" file.
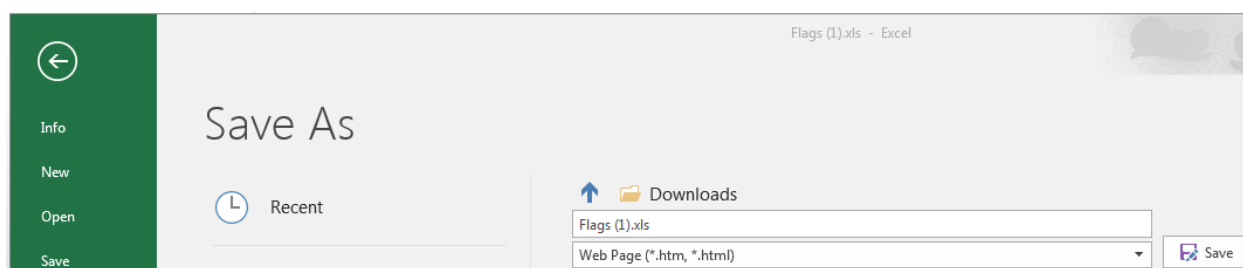
Microsoft Internet Explorer (IE) Example

Typically, Internet Explorer will ask the user what s/he wants to do (i.e., open or save the export file.) The dialog box appearance may vary among different versions of IE and/or the user's desktop configuration.

Below are just two examples from IE:
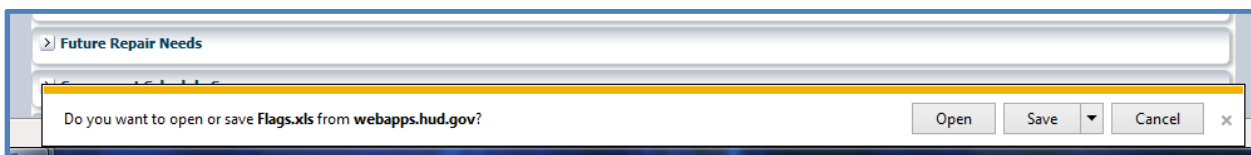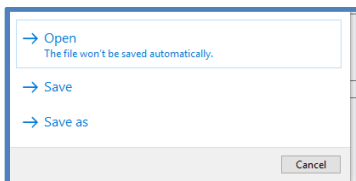
Different versions of IE vary in what the user sees after selecting either "Open" or "Save" or "Save as". As with Chrome,IE will default to a "Web Page html" file type. Accordingly, the user must explicitly choose an Excel Workbook as the file type when saving the file to their local PC.

2.3 Printing Reports – Internet Explorer Quirk

Certain standard, printable reports are available in the "Reports Panel" of the CNA e Tool:

Shown here is the Reports Panel from the Submission Portal (aka Lenders' portal). Note that the "Snapshot" report in this list does not appear as part of Validation results, but all four of these reports are also repeated for Agency staff in the Reviewer Tool.

Two of these reports do not print completely when accessed from Internet Explorer. By default, IE will print only the first page of the "Snapshot" and the "Building Unit Mix" reports. While it is possible that this fault may be fixed in future versions of IE, we strongly recommend using Chrome, which successfully prints all reports.

3. Known Calculation Errors

Below are descriptions and samples of known calculation errors, which will be corrected in a future release. Each description also notes alternative sources for the correct results.

3.1 Assessment Summary Report – Incorrect Count of Accessible Units

The Assessment Summary Report is available on the Reports Panel as part of the Validation response by both the Public Validation Engine and the Submission Portal.

In the "Site Information/Unit Mix" section of the Assessment Summary Report (Pg.2), the count of Mobility Accessible units shown is misreported.

Currently the report is providing the sum of both mobility- and sensory-impaired accessible units. An upcoming release will display separate counts for the mobility-impaired and sensory-impaired accessible units.

Correct counts of units for persons with mobility or sensory impairment may be found for a property in the Assessment Tool, "Units worksheet" columns L and M. The "Property Tree" panel produced by using the "Locate CNA" tab of the Submission Portal or the Reviewer Tool reports the same information for each building in a property.

3.2 Estimate Period Recap, Snapshot, Accessibility Repairs Cost/Unit Error

The calculation of accessibility repairs cost per unit is incorrectly reported in the Estimate Period Recap, one of the panels appearing in a Validation response. The same error is repeated in the "Snapshot" found in the Reports panel obtained from the Submission Portal. The example shown here is for a property with 240 units. Accordingly, the correct dollars per unit figure should be $391.66 rounded up to $392, which is $94,000 divided by 240 units.

Estimate Period Recap	Total	$/Unit
Immediate Repairs (Total)	$3,990,620	
Life Safety Remedies	$0	$0
Accessibility Remedies	$94,000	$0
Non-critical Needs	$3,896,620	$16,236

The same error is repeated in the "Snapshot" report:

Capital Needs/Financial Recap		Incorrect Value
Capital Needs	Total	Total Per Unit
Immediate (Accessibility) Critical Repairs	$0	$10
Immediate (Life Safety) Critical Repairs	$35,840	$597
Immediate Non-Critical Repairs	$807,213	$13,454
Future Repair/Replacements	$1,262,312	$21,039
Utility Cost Savings - Owner	$0	
Utility Cost Savings - Tenant	($165)	

While not a commonly used metric, the cost of accessibility remedies per unit is easily calculated manually by dividing the total of accessibility costs by the total number of units.

3.3 Building Unit Mix, Property Summary, Parking Counts

The Building Unit Mix table (found on the Reports panel) displays counts of garage, in-unit-garage, and surface parking spaces. In the Assessment Tool, most counts of parking spaces are separate counts of accessible and non-accessible spaces, rather than a total of spaces with a subset of the total indicating the number of accessible spaces included in the total. The Building Unit Mix table, however, is intended to report parking differently.

In the example below, the figure for Garage Parking Spaces is labeled and correctly shown as a total of all garage parking spaces, and to the right a subset of this total is shown as the number of accessible garage spaces. The total of all garage spaces is correctly reported as 15. By contrast, both in-unit-garage and surface parking space totals are incorrect in this example as the number reported is not the total of all such spaces, but only those that are non-accessible. In this example, the actual total of all in-unit-garage spaces should be 3 and the total of all surface parking should be 480.

Correct totals of accessible and non-accessible parking spaces by kind of parking are reported on the "Site Information" worksheet of the Assessment Tool in columns I and J (for surface parking), K and L (for covered surface parking), N and O (for common space garage parking) with combined totals of these in columns P and Q respectively. "In-unit garages" (e.g. townhouses with unit specific garages, not common space) are reported on the "Units" worksheet in columns N and O. Common parking space data is also reported on the "Property Tree" panel by Site or by Building for any "in-unit garages". The Property Tree panel appears for any CNA located and opened in the Submission Portal or the Reviewer Tool.

PROPERTY TOTALS			UFAS Accessible Units	
			Mobility	Sensory
# Units		240	0	0
Total Sq. Ft. Units		244,800		
Total Common Space		50,600		
Total All Sq. Ft.		295,400		
Total # Garage Pkg Spaces		15	# Accessible	5
Total In Unit Garage Spaces		2	# Accessible	1
Total # Surface Pkg Spaces		420	# Accessible	60

4. Common Assessment Tool User Errors

The Assessment Tool is an Excel template for entering data that the web-based components of the CNA e Tool process and convert to a CNA. It is an .xls spreadsheet organized in a sequence of worksheets and Visual Basic forms where each form deposits data in its associated worksheet. Data may be entered in either the forms or the corresponding worksheets, but **users should rely on the forms for data entry to have a better understanding of the data requested and to avoid errors**.

The "Instructions for Use of the CNA Assessment Tool v1.2," ("Instructions") contain both an overall explanation as well as form by form guidance. The Instructions may be downloaded from the CNA e Tool Homepage at:

https://portal.hud.gov/hudportal/documents/huddoc?id=InstructforCNATool.pdf

Until well experienced, users should keep the Instructions available and open to the section covering the form on which they are working. Following the instructions will help avoid errors.

Recorded tutorials for each form may be found on the CNA e Tool Homepage at:
https://www.hud.gov/program_offices/housing/mfh/cna/wat

Most user errors fall into two basic types: "Data Load Errors" and "SQL Insertion Errors".

4.1 Data Load Errors

A "data load error" occurs within the Assessment Tool (Excel spreadsheet) and is caused by an incorrect/inconsistent naming of an object. An object is a named item such as a participant, site, building, unit type, common space, component, alternative, etc. Each form is designed to allow users to create or name one or more objects and then describe the objects. One entry or combination of entries is the object name or ID. Other entries report facts or quantities concerning the object.

Worksheets and forms in the Assessment Tool are arranged in a logical sequence where later forms search for objects named on prior worksheets to supply data needed by the later form.
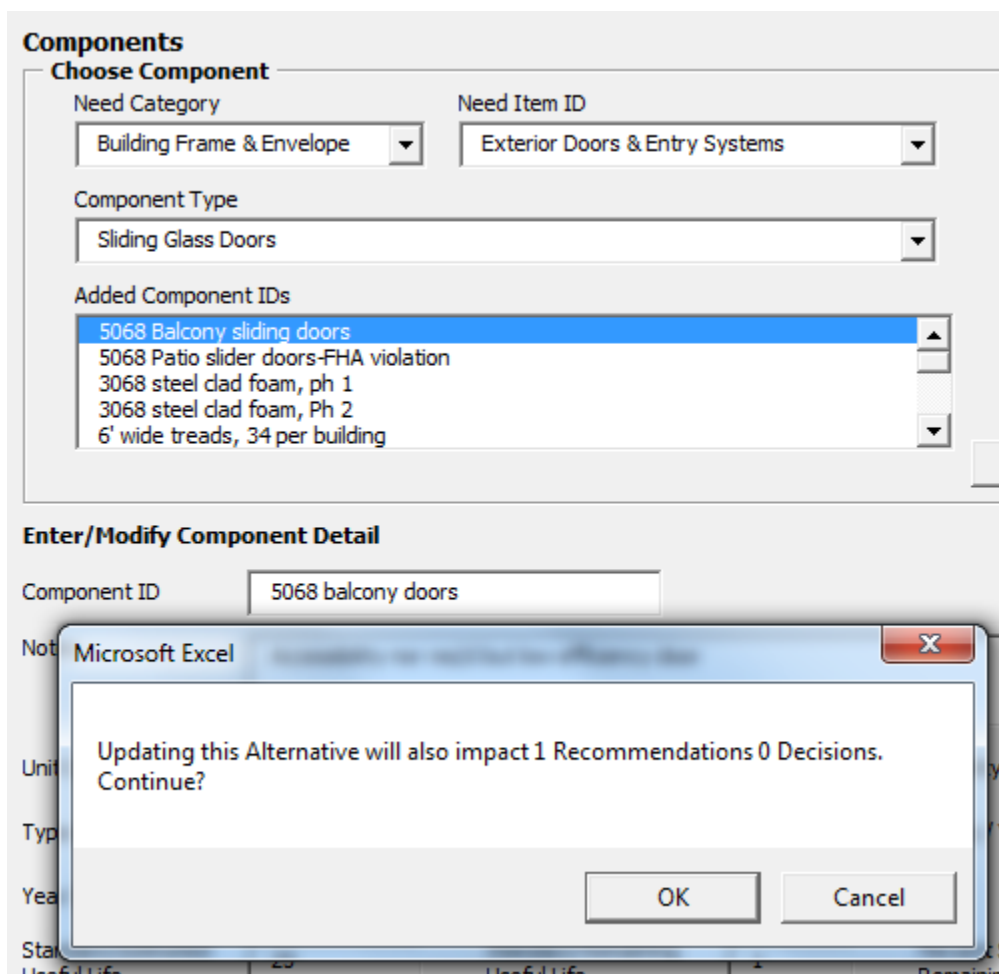
An incorrect/inconsistent object name prevents a form from identifying and loading entries required by the logic built into the form. (See "Instructions for Use of the CNA Assessment Tool", page 30 for Data Load Errors, page 32 for logical connections among Pre-Site Visit Forms, and page 89 for logical connections among On-Site Forms.)

A common cause of a data load error is incomplete editing of object names in the Assessment Tool file. An example is when a user creates a Component ID and a related Alternative and Recommendation, but then decides to change the name of the Component ID (even if only to correct a misspelling or to change capitalization). The user must make the same correction of the Component ID wherever it appears in an Alternative Pair and in a Recommendation. Failing to do so causes a Data Load Error when opening any of the forms.

For example, a user names a Component ID "5068 bulcany doors" and then also creates Alternatives and a Recommendation for the Component named "5068 bulcany doors". The user then recognizes the spelling error and decides to correct it by editing the Component ID, changing it to "5068 balcony doors". This edit might be made using either the Components form or by editing the underlying Components worksheet. Regardless, the uncorrected name, "5068 bulcany doors" still appears in the Alternatives and Repair Replace Recommendations

worksheets. As forms recalculate and search for data from related worksheets, in this example the Alternatives and Recommendations forms would search the Components worksheet for information on a component named "5068 bulcany doors." However, since this Component ID name was edited by the user in the Components form or worksheet, it can no longer be found. The Alternatives and Recommendations forms are therefore unable to load the specified data.

When a user edits an object (e.g., a Component ID in the Components form or worksheet), the Assessment Tool does not automatically update other related worksheets, in this case the


Alternatives or Repair Replace Recommendation worksheets. The Assessment Tool will warn a user if an edit made in a <u>form</u> impacts related entries in other worksheets not associated with that form, but no such warnings are triggered by edits made directly into <u>worksheets</u>. This is another reason users are encouraged to enter and edit data in forms.

When a Data Load Error occurs, this error message appears:
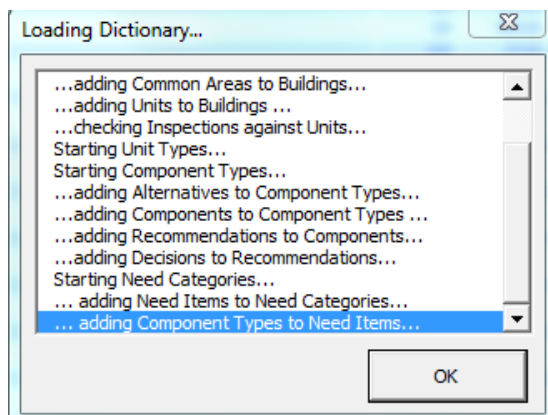
After clicking "OK" the user is advised of the location of the error:

Users can edit entries that are not object names without risking a data load error. For example, the street address of a participant can be changed, or the count of units of a certain type in a certain building, or the count of a certain Component ID. These entries are facts about the object but not the object name. Each time the "Open Form" button or the "Prepare Submit" button is used, the Assessment Tool recalculates by searching for named objects and revising any facts reported for each object.

4.2 SQL Insertion Errors

A sequel insertion or "SQL Insertion" error occurs in the CNA e Tool system when an Assessment Tool file is validated. It is caused by data entry errors in the Assessment Tool that prevent the system from storing data into the database. Typical SQL Insertion errors include:

- entering text where a number is required;

- incorrectly formatting a field where a special format is required by the database, such as dates, decimal amounts, etc.;

- exceeding the character limit for an entry; or
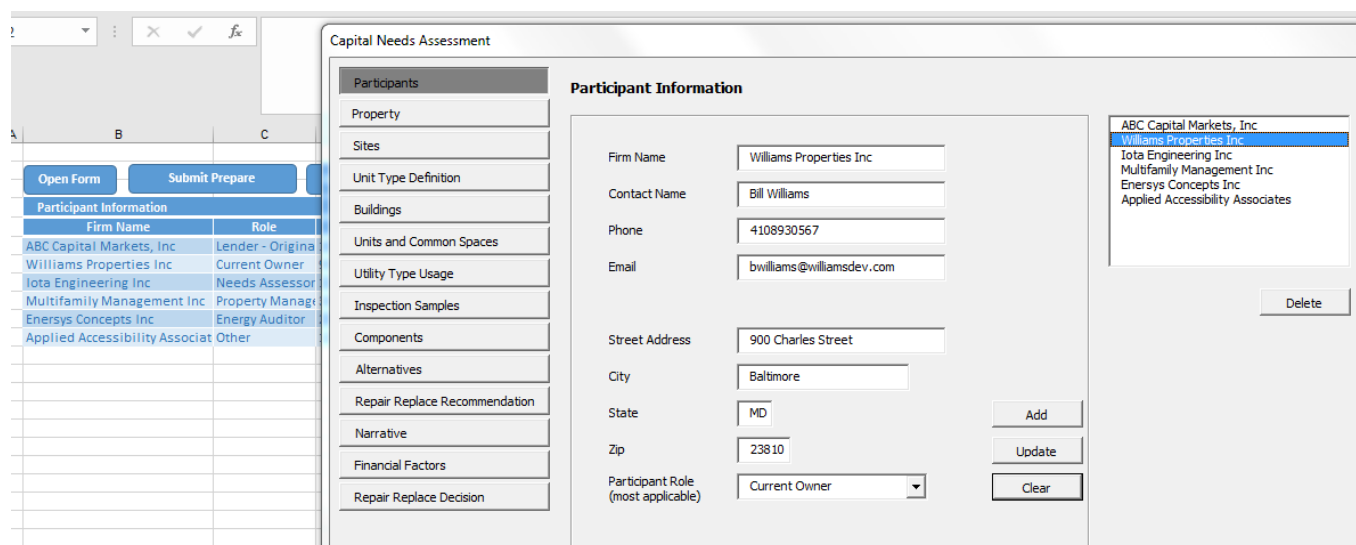
- entering duplicate objects.

While uncured Data Load Errors within the Assessment Tool may also cause SQL Insertion errors when a file is validated, not all SQL Insertion errors are caused by Data Load Errors. This is because not every critical datum is an object used by logic embedded in other forms within the Assessment Tool. For example, Seismic Thresholds are not used by the logic in any form or

worksheet. Yet because they are used by the CNA e Tool system and must be stored in the database during validation, they will cause a SQL Insertion error if non-numeric values are entered in those fields.

4.3 Duplicate Objects Cause Errors

Each object name must be unique, otherwise objects cannot be distinguished in any formula where they are used. When an object name is used in the logic embedded within the Assessment Tool forms, a duplicate object name may cause an error because the form(s) cannot distinguish which data is to be loaded. Upon validation of an assessment file containing a duplicate object, a SQL Insertion error may result because the system is not able to store in the database more than one object with the same name.

ForFor example, a participant is a Firm Name with a Role. As shown here:

Suppose Bill Williams and his cousin Joe are partners in various Limited Liability Companies or Limited Partnerships, one of which owns the subject of this CNA and both were present at the site for the CNA inspection. The user therefore wants to add Joe to the list of participants and edits the entries for Bill to add Joe, thus:

The user now clicks "Add" to add Joe to the list of participants, but the Tool responds with "object name COPY#" - which means the Tool requires the firm name to be unique.

Although the error may be "caught" while entering data in the form, it is possible to override the form behavior and thus create two identical firm names with the same role.

If the user changes "Williams Properties IncCOPY7" to "Williams Properties Inc-Joe" a unique participant object name will result, but if the user changes "COPY7" to "Williams Properties Inc" a duplicate is created. When validated, the following error will appear:

Capital Needs Validation Tool

U.S. Department of Housing and Urban Development
U.S. Department of Agriculture - Rural Development

CNA VALIDATION

⌄ Select CNA File
This system only accepts XLS files for import. Imported files must conform to HUD's published data standards for CNA files.

Bay View duplicate erro.xls   Update...   Validate   Reset

Transmission Integrity Check

Property Name	Bay View Apartments	Total Saved Alternatives	83	Total Saved Participants	6
Street Address	2000 Hilltop Lane	Total Saved Recomendation	76	Total Saved Utility Rates	4
City	Annapolis	Total Saved Decisions	0	Total Saved Inspection Samples	0
State	MD	Total Saved Common Spaces	0		
Total Saved Components	76	Total Saved Building Unit Types	0		

⟩ Flags

❌ Error   ⊠

An Error condition prevented SQL Insertion for PARTICIPANT section with Firm Name as - Williams Properties Inc. Please check the data and resubmit. *

⟩ Financial Schedule   OK

⟩ Critical Repair Needs

Now also suppose that the partners both own and self-manage the property with Bill primarily responsible for development/asset management and Joe taking care of property management. In this event, Williams Properties Inc., could be named twice, once with a role as "owner" and once as "property manager." This results in two unique participant objects.

In another example, the following duplication of a site was entered directly into the "Sites" worksheet, rather than the form.

Open Form						
Sites						
Site ID	Street Address	City	State	Zip Code	Square Feet	
Single site	2000 Hilltop Lane	Annapolis	MD	21401	609,840	
Single site	2000 Hilltop Lane	Annapolis	MD	21401	609,840	

It initiates the following Data Load Error when opening a form:
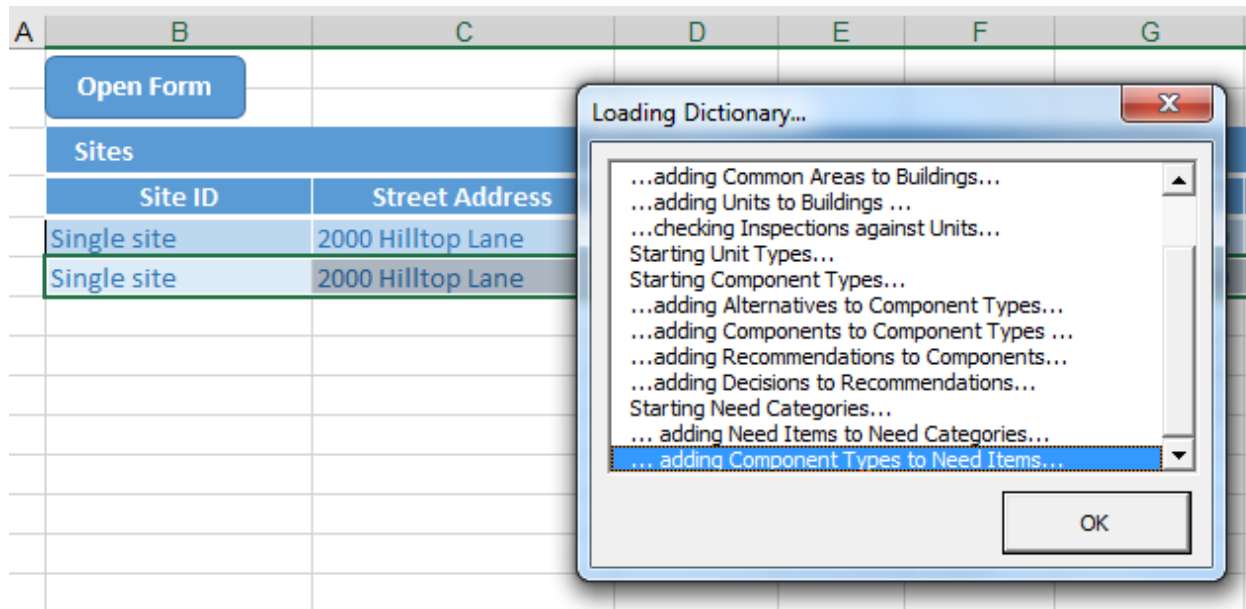
When the user clicks "OK" the Assessment Tool describes the error:
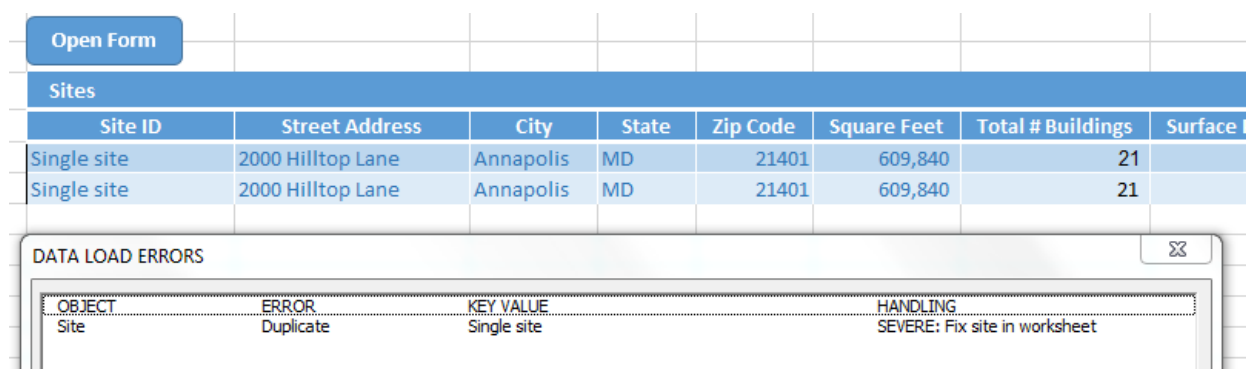
Users should use Assessment Tool forms to avoid duplicating objects, and if the user is copying/pasting or entering data directly to worksheet rows, s/he must exercise care to avoid duplicating objects, or alternatively, creating unintended new objects that are apparent or "almost" duplicates.

Apparent Duplicates

Users should keep in mind that the Assessment Tool and the CNA e Tool portals do not speak/read English, they merely read a sequence of numbers, spaces, and/or characters. This means that different capitalization, spelling, and/or spacing of entries may represent a duplicate, but the system will recognize these as separate items rather than duplicates. While the user may be indifferent about spacing or capitalization, these differences are significant to the Assessment Tool and the CNA e Tool portals. The user may see no difference between "5068 Balcony sliding door" and "5068 balcony sliding door," but the system will. Consequently, when the user accidentally creates an apparent duplicate, the system cannot
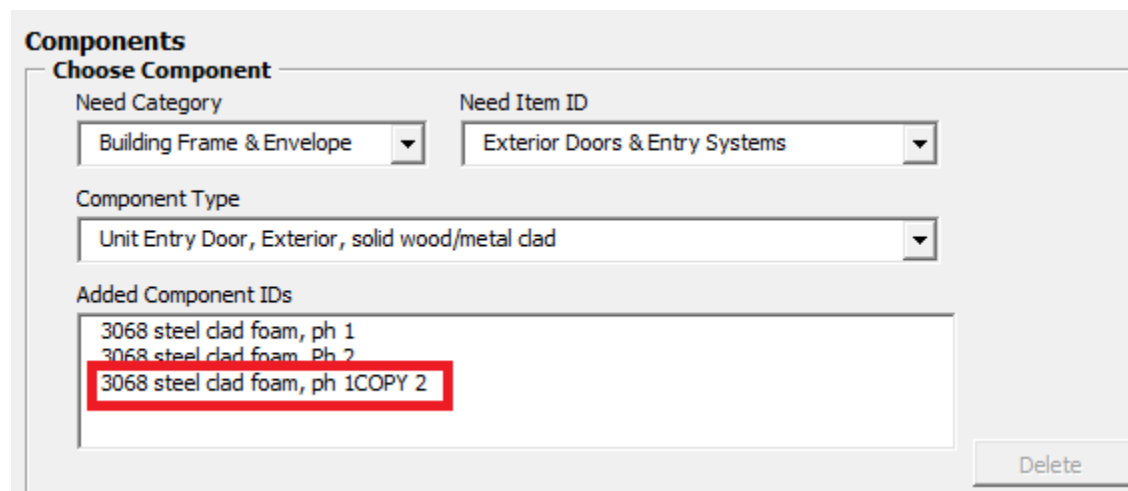
assist the user to identify the error. From the system perspective, a copy is either exact, or not a copy at all.

Not Every Duplicate Object Will Trigger a Warning - Generic Component IDs

While the Assessment Tool is programmed to "catch" duplication errors and warn the user, at least one possible duplication escapes easy detection. Component IDs can be duplicated when a non-descriptive, generic Component ID name is used for multiple Component Types. For example, "Railings, wood," "Sliding Glass Doors," and "Faucets & Valves" are Component Types. A user might describe the Component ID for each generically with the name "tenant unit replacements," or "replace with like kind." These generic, non-descriptive names are bad choices for several reasons.

First, this results in duplicate Component IDs which will cause errors, but the Assessment Tool was not programmed to provide an early warning or caution for this type of duplication. (This will be addressed in a future release, however.) Second, such generic Component IDs fail to communicate meaningful information when displayed in panels and reports where limited space prevents the display of the Component Type, Need Item, and Need Category. The reader cannot therefore determine whether the Component ID is a faucet, a door, or a railing. Component IDs should be specific rather than generic. Specific Component IDs both avoid the likelihood of duplication and communicate meaningfully.

Shown here is an example of the Assessment Tool indicating that a Component ID is a copy:

Shown here is an example of a duplicate Component ID name for two different Component Types. The Assessment Tool gives the user no advance warning of this error.

The best method for discovering this error is to click each Component ID in the Components form. If the selected Component ID is a duplicate, the following message appears:

The Assessment Tool is programmed to report all the data entries for the selected Component ID, but is unable to distinguish among the duplicates. As a result, it will choose the first, which may not be for the correct Component Type - in this example, a sliding glass door. Validating an Assessment Tool with the same Component ID name for various Component Types returns this error:

4.4 Invalid Data Types and Formats

As mentioned in Section 4.2, invalid data entries are user entries of the wrong format, such as:
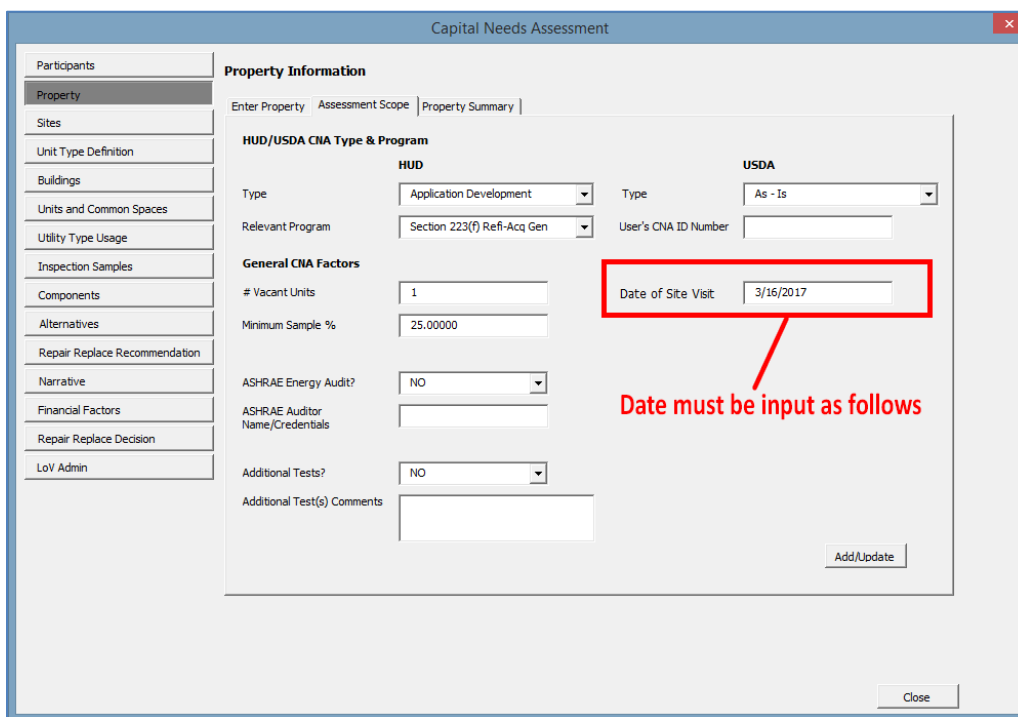
- text when a number is required,

- entries not consistent with a required "list of values" (LOV, or 'drop down list"),

- entries outside of a required range, or

- entries exceeding the permitted number of characters.

When validated, such mistakes usually trigger a SQL Insertion error. Most such errors can be avoided by following the "Instructions for Use of CNA Assessment Tool v1.2" (Instructions), but no set of instructions or form design is perfect -, which is true for the CNA e Tool as well. The following subsections describe "invalid data" errors observed in recent user queries and help desk requests. These are described in the order of the worksheets or forms within the Assessment Tool where the invalid entry occurs.

4.4.1 Dates

The Assessment Tool asks the user to enter various years/dates. The query will specify a "year" (e.g., "Year Installed" on the Components Form, or "Year Built" on the Buildings form) or will request a date including month, day and year (e.g, "Date of Inspection" on the Property Form, Assessment Scope sub-form.)
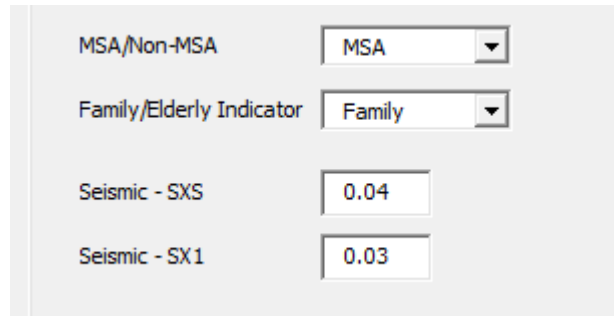
- When a year is requested the user must enter the 4-digit calendar year, e.g., 2017 or 1988.
- When a date is requested, users must enter the dates in the format: mm/dd/yyyy.
- A range of dates or years, or more than one date or year, are never acceptable. Consult the Instructions for guidance when more than one date seems appropriate.

4.4.2 Property Form - Seismic Threshold Entries Are Numbers Only

The entries for seismic threshold values located on the Property Form are numbers only. Do not add the "g" included in the downloaded USGS Seismic map report.

4.4.3 Naming Unit Types

The types of units found in buildings are named and given certain characteristics on the Unit Types form and worksheet. In the order of forms, "Unit Type Definition" appears immediately before "Buildings", indicating that Unit Types should be defined before buildings are defined in the Assessment Tool. Each defined Unit Type should reflect a unique combination of the number of bedrooms, bathrooms, and square feet.

The accessibility of a unit for persons with disabilities should <u>NOT</u> be used to define a distinct Unit Type. Accessibility is a design feature that can and should be true of units of all types found in a property. Indeed, statutes and rules require that accessible units be available proportionately among all types of units. The CNA e Tool is designed to evaluate whether accessible units are present in the requisite percentage by Unit Type. If, if all accessible units are segregated into "Accessible Unit Types" by the user, flags will occur for incorrect distribution since there will be no accessible units inspected for the other Unit Types.

Generally, the fewest possible Unit Types should be named because the sampling percentage is applied to the number of units of each Unit Type as well as to all of the units in each building. Naming more Unit Types increases the likelihood of oversampling. For this reason, units with the same count of bedrooms and baths but with minor differences in square footage may be included in a single named Unit Type reflecting their average size in square feet - provided that the difference in size is not in fact equivalent to an additional room, and that the actual range of sizes is described in the Narrative. In such cases, Assessors must still take care to provide accurate quantities for components measured in square feet of floor or wall area for any critical or non-critical repairs.

Finally, the number of baths is a value where whole numbers are not required. For example, a 2 BR, 1.5 ba (two-bedroom, one-and-a-half bath) unit would have "1.5" entered as the number of baths.

4.4.4 Recommendation Form - Duration & Time to Complete Are Numbers

A whole number - never a range and not text - is the only acceptable entry for "Duration" and "Time to Complete" on the Repair/Replace Recommendation form.

For "Duration", the entry is a whole number of years before and after the "End of Cycle" year, over which years the cost of the recommendation will be spread in equal amounts. Duration is only used for future repairs, meaning the answer to "when?" is "End of Cycle." A typical entry is 1 or 2. For some items like appliances, where an average number are proven to be replaced annually, the entry would be a value as close as possible to half the Remaining Useful Life (RUL) of the group of appliances identified as the Component ID. (Meanwhile the "Year Installed" for this group of appliances would be the current year minus half the RUL.) An entry other than a whole number will cause a SQL Insertion error.

For "Time to Complete" the entry is the number of months from the beginning of construction (typically the closing date of the loan) required to complete the particular repair or replacement. "Time to complete" should only be entered when the answer to the question "when?" is "Now." No entry should be made otherwise. Invalid entries in this cell will not cause a validation error.

4.5 Unflagged Validation Error - # Components ≠ # Recommendations

After validating an Assessment Tool file, users should always check the count of items recorded in the "Transmission Integrity Check" box. The number of Recommendations must equal the number of Components, and the number of Alternatives must equal or exceed the number of Components. No automated flag currently exists for this error. A future release will provide such a flag, and in the interim, HUD staff will have a custom flag to point out this error when it occurs in a submitted CNA. These same counts of Components, Alternatives and Recommendations are also reported in the "Snapshot" found in the Reports panel of both the Submission Portal and the Reviewer Tool where Lenders and reviewers can confirm that the count of Components and Recommendations is the same and that the count of Alternatives equals or exceeds Components.

If the number of Recommendations is less than the number of Components, it means that a Component has been identified for which there is no Recommendation. In the example below, an Alternative was deliberately deleted from a row of the Repair Replace Recommendation worksheet, negating the Recommendation and causing a SQL Insertion error. However, the mere absence of a Recommendation for a Component ID will not cause an error or trigger an automatic flag.
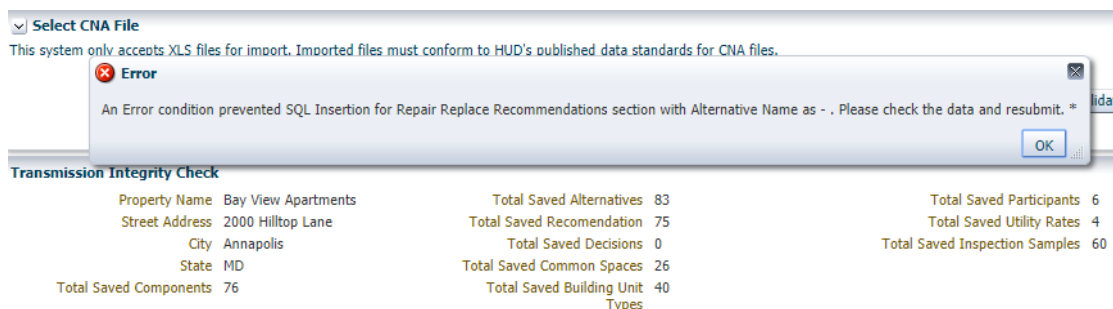
5. Errors Due to System/Software Incompatibility

Some users may experience one or both of two errors identified as "SQL Insertion Error on All Objects" or "Compile – Automation Error, Catastrophic Failure". These errors are related to the set-up and the version of their operating system and the version of MS Office they use to create the Assessment Tool. These errors seem to occur in combinations of newer versions of MS Office with older Windows operating systems. The following subsections describe the errors, their impact, and the recommended remedies/workarounds.

5.1 SQL Insertion Error on All Objects

This error is <u>NOT</u> related to wrong data formats or invalid data entries (i.e., user errors.) To the best of our knowledge, this error occurs when a user validates either an Assessment Tool workbook that they did not create on their PC (they received it through email, for instance) or a workbook they did create but later "Saved As" a new file name, and have not closed and reopened the file prior to uploading for validation.
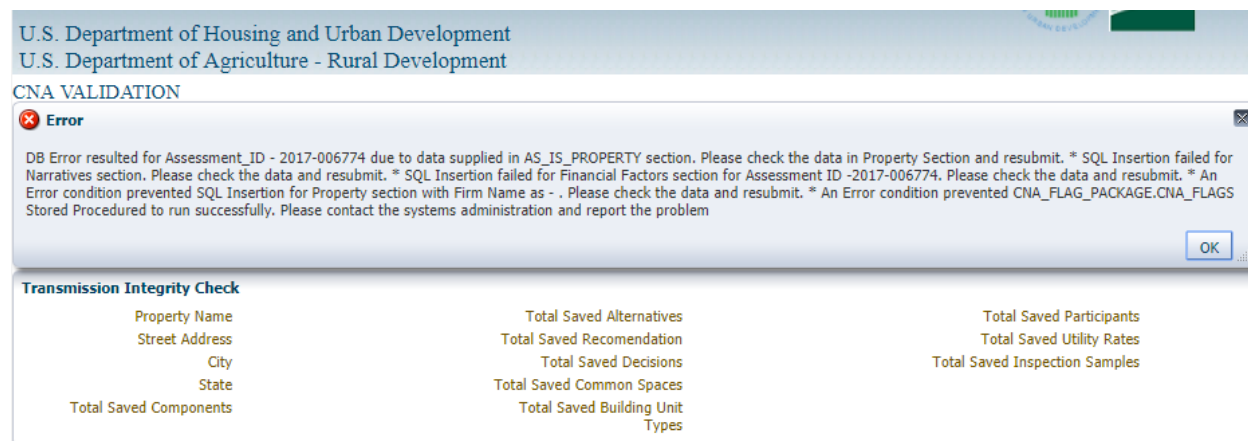

The fastest remedy is to open the saved workbook, click on the Participant Information worksheet, and then click the "Submit Prepare" button at the top right of the worksheet. This needs to be followed by a regular "Save" rather than a "Save As." The workbook the user "prepared for submission" must be saved under the same name.

The same process can be repeated for workbooks received from elsewhere. It may not be enough to download it and then upload for validation. It needs to be opened, prepared for submission, and then saved in place.

5.2 Compile Error: Automation Error - Catastrophic Failure

Although this error appears threatening, it is harmless. It occurs when a user first opens the workbook. A Visual Basic code window is opened and an error popup is displayed, as pictured below.
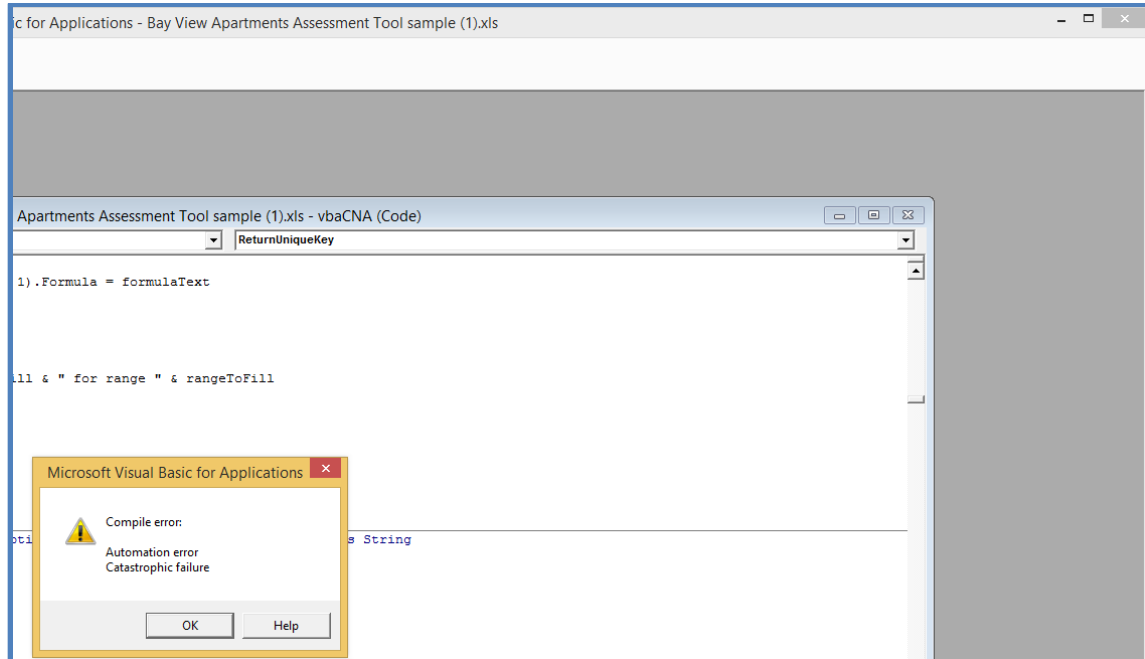

The fastest remedy is to click "OK" on the popup and then close blank grey screen (click the "x" in upper right corner) and/or the Visual Basic code window.

This error has been traced to certain versions of MS Office updated with Microsoft patches and run on certain operating systems. Since the Assessment Tool was first in development, MS Office and Windows have been updated several times. Below are results of our tests of various combinations of Windows Operating Systems and MS Office versions with both the 2003 version of Excel format (.xls) as well as the newer.xlsm version.

MS Office Version	.xls	.xlsm
Any Office with Mac	Fail	Fail
2010 with Windows 7	Good	Good
2010 with Windows 10	Good	Good
2013 with Windows 7	OK (a, b)	Fail
2013 with Windows 10	Good	Good
2016 with Windows 7	OK (a, b)	Good
2016 with Windows 10	OK (a, b)	Good

a. As described in Section 5.1, some users may see a lengthy SQL Insertion error when attempting to validate an Assessment Tool in an .xls format (see the picture below for an example of the error.) This error may happen when users receive an Assessment Tool they did not create on their PC or if they saved their own Asessment Tool using "Save As" under a different name, and proceed to upload it for validation. To remedy this error, the user may need to open the file, click the **Submit Prepare** button on the **Participant Information** tab, and then "**Save**" the file before uploading.
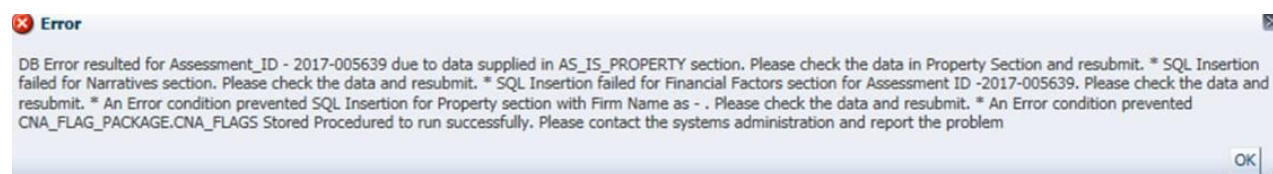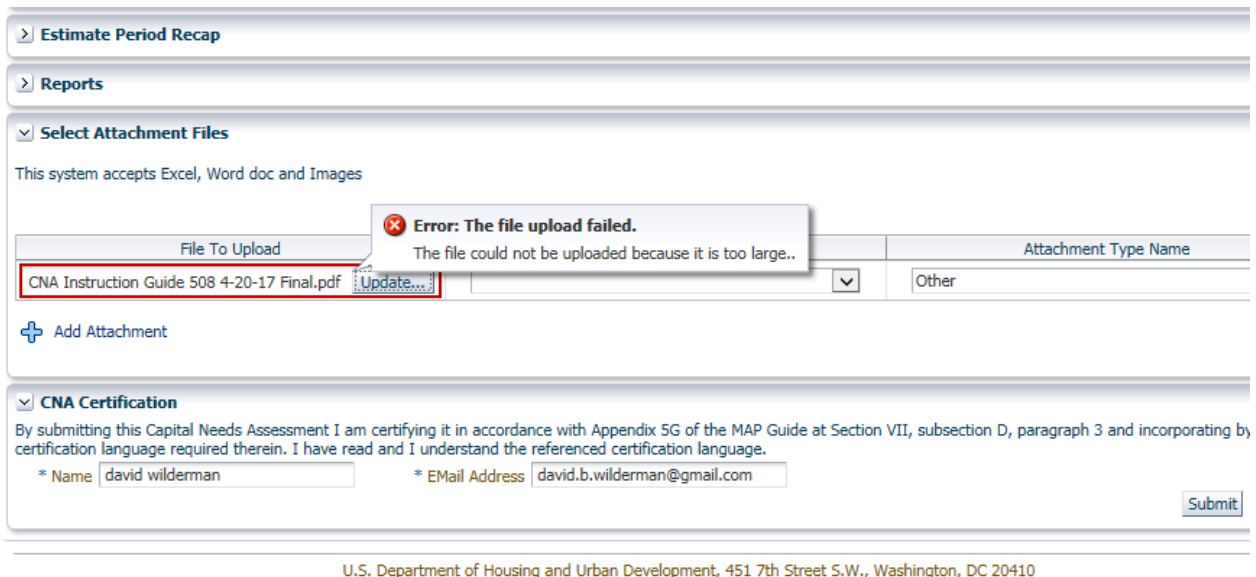

b. As described in Section 5.2, upon opening an Assessment Tool, a user may receive a Catastrophic Error popup on a screen showing Visual Basic code. If the user clicks "OK" on the error popup and closes the Visual Basic window, the Assessment Tool which is open under the Visual Basic screen will still run as expected.

6. Attachments

In the CNA e Tool system, attachments are intended to be documents that would typically be appendices or exhibits to a traditional paper CNA.

6.1 Attachment Size and Type Limits

A user can upload as many attachments as required, but the size limit for each is 5MB. The user should be aware that the larger the file, the more time it will take to upload. The following file types can be accepted: image files such as JPEG, PDF and/or Word, and Excel documents. The picture below illustrates the error message a user sees when attaching a file that is larger than the 5MB limit.

6.2 Organization and Naming of Attachments

Attachments should be individually named and attached, rather than combined so that their identity and existence cannot be ascertained without downloading and opening the attachment. When the "Attachments" panel for a submitted CNA is opened, the list of attachment names should read like the list of exhibits or appendices in a traditional paper CNA.

Submitters should NOT attach .pdf or .doc files that are an entire, traditional CNA report or major portions thereof. Such combining of attachments negates a key objective and benefit of the CNA e Tool system, which is to enable users to find information quickly and always in the same location without "thumbing" through multiple pages of combined narrative, charts, tables, photos, and related materials arrayed in a unique presentation.

7. CNA Retention Schedule

CNAs uploaded to the Validation Engine or the Submission Portal are stored in the database and retained based on their Status, as follows:

- Received for Validation = Four days if uploaded to the Validation Engine, 30 days when validated in the Submission Portal
- Submitted, Under Review, Returned = Three years
- Approved CNAs will be retained indefinitely in the database.